



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,963	10/06/2003	Gene Mason	MASIMO.353A	3580
20995	7590	05/17/2005		
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER KREMER, MATTHEW J	
			ART UNIT 3736	PAPER NUMBER

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/679,963	Applicant(s) MASON, GENE	
	Examiner Matthew J Kremer	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-18 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/20/2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,748,254 to O'Neil et al. (O'Neil). O'Neil teaches an emitter 11, a detector 7, a probe housing that includes layers 1 and 3 and a first positioning member in the

Art Unit: 3736

form of a tab, protruding lenses 4, a protruding optical barrier 6, and an attachment mechanism in the form of layers 8-10. (Fig. 1 of O'Neil).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-12, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent U.S. Patent 5,099,842 to Mannheimer et al.

(Mannheimer) in view of U.S. Patent 5,813,980 to Levinson et al. (Levinson).

Mannheimer teaches an emitter 110, a detector 120, a probe housing, protruding lenses 100, and a protruding optical barrier 190. (Figs. 3a-3b of Mannheimer). Mannheimer teaches an attachment mechanism is used. (column 4, lines 21-24 of Mannheimer).

Levinson teaches such an attachment mechanism. (Figs. 2 and 5 of Levinson).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the attachment mechanism of Levinson in the invention of Mannheimer since Mannheimer teaches the use of an attachment mechanism and Levinson teaches such mechanisms. In regard to claim 11, mateable positioning members are inherently included in both the attachment mechanism and probe housing since such members are required so that both components form one device. In regard

to claims 24 and 26, Mannheimer teaches the dimensions of the lenses. (column 3, lines 21-32 of Mannheimer).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,772,587 to Gratton et al. (Gratton) in view of U.S. Patent 6,748,254 to O'Neil et al. (O'Neil). Gratton teaches an optical probe that includes a probe housing 12 and a protruding optical barrier 30. (Fig. 2 of Gratton). Gratton teaches that several different light sources and detectors are used. (column 5, line 66 to column 6, line 15 of Gratton). Gratton does not teach the use of convex lenses. O'Neil teaches that the use of convex lenses for the detector and emitters assist in optical coupling of light to the skin. (column 3, lines 57-62 of O'Neil). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the convex lenses of O'Neil in the invention of Gratton since such lenses assist in the optical coupling of light to the skin. In regard to claim 11, mateable positioning members are inherently included in both the attachment mechanism (the strap in Fig. 1 of Gratton) and probe housing (reference numeral 12 in Fig. 1 of Gratton) since such members are required so that both components form one device.

7. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,772,587 to Gratton et al. (Gratton) in view of U.S. Patent 6,748,254 to O'Neil et al. (O'Neil) as applied to claims 11-12, and further in view of U.S. Patent 5,830,137 to Scharf and further in view of U.S. Patent 4,802,485 to Bowers et al.

(Bowers). Gratton teaches that a more central area of the body can be examined. (column 2, lines 35-52 of Gratton). Scharf teaches that the forehead is such a location. (Abstract of Scharf). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the combination on the forehead as disclosed by Scharf since Gratton teaches that a more central area of the body can be an examination site and Scharf teaches one such site. The combination does not teach the particulars of how the sensor is attached to the forehead. Bowers teaches a headband (Fig. 3 of Bowers) that would fulfill the requirements of providing an attachment means for the forehead as set forth by the combination and ensure that the sensor is placed against the forehead. (column 4, lines 28-39 of Bowers). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the headband of Bowers in the combination since the combination requires an attachment means for the forehead and Bowers teaches one such means and the headband of Bowers ensures that the sensor is placed against the forehead. In regard to claim 12, the combination teaches a biasing member 52. (Fig. 3 of Bowers). In regard to claim 14, attachment device 40 is a headband. In regard to claims 15-16, ruler-like indicia are disclosed (reference number 44 in Fig. 3 of Bowers).

8. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,748,254 to O'Neil et al. (O'Neil) as applied to claim 11, in view of U.S. Patent 5,237,994 to Goldberger. O'Neil teaches that the light source can emit two different wavelengths for measuring blood oxygen saturation, which are known. (column

3, lines 17-20 of Goldberger). Goldberger teaches that 655nm and 940 nm are such wavelengths. (column 3, lines 35-42 of Goldberger). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wavelengths of Goldberger in the invention of O'Neil since O'Neil teaches that known wavelengths can be used and Goldberger teaches such wavelengths. In regard to claim 28, it is noted that the limitation "wherein said unexpected wavelength causes the oximeter to determine more accurate values for said at least one physiological parameter" was not given any patentable weight since it does not add any further structural limitation to the claimed optical probe.

9. Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent U.S. Patent 5,099,842 to Mannheimer et al. (Mannheimer) in view of U.S. Patent 5,813,980 to Levinson et al. (Levinson) as applied to claims 24 and 26. Mannheimer teaches that the dimensions of lenses 100 can be changed. (column 3, lines 21-32 of Mannheimer). This teaching provides a clear suggestion that the dimensions of the lenses can be modified and that the determination of the most appropriate dimensions of the lenses by routine experimentation would, therefore, be prima facie obvious to one having ordinary skill in the art.

Response to Arguments

10. Applicant's arguments filed 4/20/2005 have been fully considered but they are not persuasive. The Applicant asserts that the O'Neil patent discloses lenses 4 bonded

within and above a semi-rigid optical mount 6. The Examiner agrees with this assertion. Next, the Applicant cites column 5, lines 32-42 of O'Neil for support of the proposition that lenses 4 and not the mount 6 protrudes into the body tissue. The Examiner believes that the Applicant has concentrated on this passage to the exclusion of O'Neil's other teachings. Although column 5, lines 32-42 of O'Neil teaches that the lenses protrude into the skin, O'Neil does not teach that mount 6 does not. To the contrary, O'Neil's patent points to the conclusion that the mount does protrude into the skin. First, O'Neil shows that both lenses 4 protrude the same distance from the housing (layers 1 and 3). (Fig. 4 of O'Neil). Fig. 4 of O'Neil shows that a protruding optical barrier 6 protrudes about the same distance from the housing (layers 1 and 3) as the lenses 4. (Fig. 4 of O'Neil). The optical barrier's distance from the housing is not required to be identical to the lenses' distance from the housing. The limitation "wherein attachment of the attachment mechanism to the body tissue positions the probe housing against the body tissue with sufficient pressure to noninvasively recess the protruding optical barrier into the body tissue and to noninvasively recess the protruding emitter lens and the protruding detector lens into the body tissue substantially along a plane thereof" in claim 11 only requires that the structure must be capable of providing such a condition. In this case, the attachment mechanism in the form of layers 8-10 in the O'Neil patent is capable of providing sufficient pressure to the body tissue that would result in recesses for the lenses and the optical barriers because both the lenses and optical barriers protrude from the housing. (see Fig. 4 of O'Neil). Further, since the optical barrier extends out of the housing at about the same distance, the optical barrier inherently

Art Unit: 3736

recesses into the body tissue substantially along the same plane as the recesses of the lenses if sufficient pressures is applied. Indeed, O'Neil teaches that this effect is desired so that the potential for the shunting of light is reduced. (column 3, lines 54-57 of O'Neil).

11. Applicant's arguments with respect to claims 12-16 and 24-30 have been considered but are moot in view of the new ground(s) of rejection.

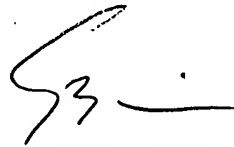
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kremer whose telephone number is 571-272-4727. The examiner can normally be reached on Mon. through Fri. between 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew Kremer
Assistant Examiner
Art Unit 3736



ERIC F. WINAKUR
PRIMARY EXAMINER